

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013128**Date Inspected:** 06-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

|                                    |                          |                                  |                    |    |
|------------------------------------|--------------------------|----------------------------------|--------------------|----|
| <b>CWI Name:</b>                   | Li Yang and Wu Zhi Cheng | <b>CWI Present:</b>              | Yes                | No |
| <b>Inspected CWI report:</b>       | Yes No N/A               | <b>Rod Oven in Use:</b>          | Yes No N/A         |    |
| <b>Electrode to specification:</b> | Yes No N/A               | <b>Weld Procedures Followed:</b> | Yes No N/A         |    |
| <b>Qualified Welders:</b>          | Yes No N/A               | <b>Verified Joint Fit-up:</b>    | Yes No N/A         |    |
| <b>Approved Drawings:</b>          | Yes No N/A               | <b>Approved WPS:</b>             | Yes No N/A         |    |
|                                    |                          | <b>Delayed / Cancelled:</b>      | Yes No N/A         |    |
| <b>Bridge No:</b>                  | 34-0006                  | <b>Component:</b>                | OBG Trial Assembly |    |

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 9CE

This QA Inspector performed two Party (Caltrans QA and ABF QC) joint Survey Inspection for the following Segment 9CE from Panel Point 77 to 79.

Corner Assembly Cope Holes dimension measurements at PP 76.5, PP 77, PP 77.5, PP 78, PP 78.5 and at PP 79 Cross Beam and Bike Path side.

Flatness measurement for Floor Beam at PP 77, PP 78 and PP 79 Cross Beam and Bike Path side.

Flatness measurement for Deck Panel to Corner Assembly from PP 76.25 to PP 79 Cross Beam and Bike Path side.

Flatness measurement for Side Panel to Corner Assembly from PP 76.25 to PP 79 Cross Beam and Bike Path side

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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and

Plumbness and Flatness measurement for Deck Panel to Deck Panel Diaphragm at PP 77, PP 78 and PP 79 East and West side of the Diaphragm.

### Segment 7BE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint SSD27-PP051-047. Welder is identified as 220069 located on PMCK Partial Height Diaphragm at FL3 area. The ZPMC QC was identified as Mr. Feng Ya Jung. In process Flux Cored Arc Welding (FCAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-345-FCAW-4G (4F)-Repair.

### Segment 7BE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint SSD27-PP051-137. Welder is identified as 054467 located on PMCK Partial Height Diaphragm at FL3 area. The ZPMC QC was identified as Mr. Feng Ya Jung. In process Shielded Metal Arc Welding (SMAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-345-SMAW-4G (4F)-Repair-1.

### Cantilever

This QA Inspector observed ZPMC welding personnel performing welding for weld joint BK001-026-007. Welder is identified as 220069 located on PMCK Cantilever Skin Plate. The ZPMC QC was identified as Mr. Wan Jei. In process Flux Cored Arc Welding (FCAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-B-T-2231-Tc-U4b-F.

### Cantilever

This QA Inspector observed ZPMC welding personnel performing welding for weld joint BK001-026-009. Welder is identified as 220069 located on PMCK Cantilever Skin Plate. The ZPMC QC was identified as Mr. Wan Jei. In process Flux Cored Arc Welding (FCAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-B-T-2231-Tc-U4b-F.

### Segment 7AW to 7BW

This QA Inspector observed ZPMC personnel performing pencil grinding at the Bottom Panel T-Ribs to T-Ribs web cope holes. Please refer the pictures attached below for more comprehensive details.

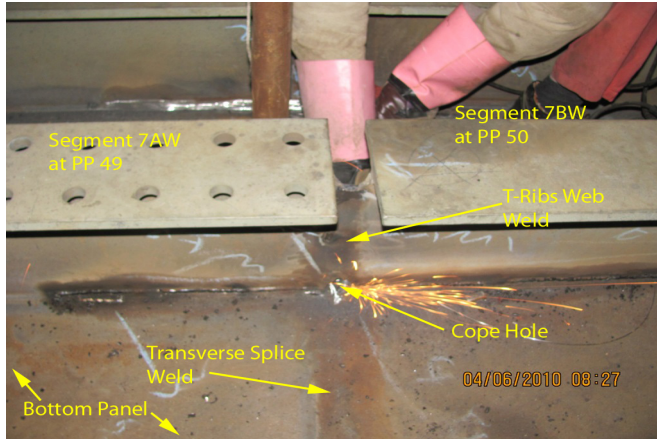
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark

QA Reviewer